REMARKS

Counsel for Applicants spoke with Examiner Yu and Supervisory Examiner Jeffrey Siew via telephone on September 15, 2005. Applicants would like to thank Dr. Yu and Mr. Siew for the guidance they provided during this conversation. The amendments and remarks set forth herein are based on this conversation.

The Advisory Action dated August 24, 2005 stated that the amendments filed July 15, 2005 would not be entered. However, it was agreed during the telephone conversation that the amendments would in fact be entered. Thus, Applicants have used the amendments of July 15, 2005 as a starting point for the current amended claims (i.e., Applicants have not reiterated the amendments set forth in the previous Response).

Applicants agreed during the telephone conversation to cancel claim 1 and convert claim 2 into independent form. These changes are incorporated in the present amendments. In addition, all claims that were previously dependent on claim 1 have been amended to depend on claim 2.

During the telephone conversation, there was some discussion of the utility of the present invention. Although a specific rejection was not set forth at that time, Applicants would like to reiterate and expand on several points that were briefly discussed in the Amendment and Response to Office Action dated January 13, 2005. Applicants discussed with the Examiner the utility of the present invention for the diagnosis of Down syndrome. Down syndrome is associated with trisomy of chromosome 21, but it does not require trisomy of the entire chromosome. Clinical features of Down syndrome have been specifically associated with trisomy of the

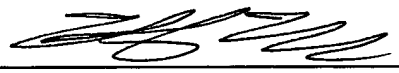
21q22 region of the chromosome. SH3D1A has been mapped to the q22.2 region of chromosome 21 (see specification, page 3, line 25). Thus, the nucleic acids of the present invention may be used as probes for diagnosing Down syndrome or detecting a predisposition to develop clinical features of Down syndrome, by detecting for example gene copy number. The specification specifically teaches the use of the claimed nucleic acids as probes (see specification, page 17, line 5 to page 18, line 3).

CONCLUSION

In view of the foregoing, it is submitted that the present claims are in condition for allowance. Accordingly, Applicants respectfully request that a Notice of Allowance be issued.

Respectfully submitted,
Perkins Coie LLP

Date: 9/19/05



Patrick D. Morris, Ph.D.
Registration No. 53,351

Correspondence Address:
Customer No. 34055
Patent - LA
Perkins Coie LLP
P.O.Box 1208
Seattle, WA 98111-1208
Telephone: (310) 788-9900
Facsimile: (310) 788-3399